

WHAT IS CLAIMED IS:

1. A method for inducing a psoriasis-like syndrome in an animal, the method comprising:

transferring a purified CD45Rb positive T cell population from a donor animal to an immunocompromised animal host, wherein said T cell population is tolerant of the host major histocompatibility antigens but is immunoreactive with one or more of the host minor histocompatibility antigens;

administering at least one pro-inflammatory cytokine and at least one polyclonal activating agent to said immunocompromised animal host;

wherein said host develops a disease having characteristics of human psoriasis.

2. The method of claim 1, wherein said T cell population is CD4<sup>+</sup> CD45Rb<sup>hi</sup>.

3. The method of claim 1 wherein the donor and host animals are MHC matched.

4. The method of Claim 1, wherein said immunodeficient animal is an immunodeficient rodent.

5. The method of Claim 4, wherein said immunodeficient animal is a *scid-scid* mouse.

6. The method of Claim 1, wherein said pro-inflammatory cytokine is interleukin-12.

7. The method of Claim 6, wherein the dose of said IL-12 is at least about 0.1 ng/gram weight of host, and not more than about 2 ng/gram weight of host.

8. The method of Claim 7, wherein said IL-12 is administered at about one day and at about three days after transferring said T cell population.

9. The method of Claim 1, wherein said polyclonal activating agent is an endotoxin.

10. The method of Claim 9, wherein the dose of said endotoxin is from about 0.1  $\mu\text{g/g}$  weight of host to about 5  $\mu\text{g/g}$  weight of host.

11. The method of Claim 1, wherein said polyclonal activating agent is a superantigen.

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12. The method of Claim 11, wherein said superantigen is a bacterial superantigen.

13. The method of Claim 12, wherein the dose of said superantigen is from about 0.1  $\mu\text{g/g}$  weight of host to about 5  $\mu\text{g/g}$  weight of host.

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14. A method for screening a candidate therapy for efficacy in treatment of psoriasis, the method comprising:

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transferring a purified CD45Rb positive T cell population from a donor animal to at least one immunocompromised animal host, wherein said T cell population is tolerant of the host major histocompatibility antigens but is immunoreactive with one or more of the host minor histocompatibility antigens;

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administering at least one pro-inflammatory cytokine and at least one polyclonal activating agent to said immunocompromised animal host; wherein said host develops a disease having characteristics of human psoriasis;

treating said animals with said candidate therapy;

determining the severity of disease in the presence of said therapy,

wherein a decrease in severity of disease in the treated animals relative to control animals is indicative of efficacy in treatment.

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15. The method of claim 14, wherein said T cell population is  $\text{CD4}^+$   $\text{CD45Rb}^{\text{hi}}$ .

16. The method of claim 14 wherein said donor and host animals are MHC matched.

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17. The method of Claim 14, wherein said therapy is treatment with a candidate pharmaceutical agent.

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18. The method of Claim 17 wherein said candidate pharmaceutical agent is a monoclonal antibody.

19. A method of claim 18 wherein said antibody binds to an antigen selected from the group of interferon gamma, interleukin 12, E-selectin, P-selectin, CD3 or alphaE integrin subunit.

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20. The method of Claim 14, wherein said immunodeficient animal is an immunodeficient mouse or rat.

21. The method of Claim 20, wherein said immunodeficient animal is a *scid-scid* mouse.

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22. The method of Claim 14, wherein said pro-inflammatory cytokine is interleukin-12.

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23. The method of Claim 14, wherein said polyclonal activating agent is an endotoxin.

24. The method of Claim 14, wherein said polyclonal activating agent is a superantigen.

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25. A method of treating a patient suffering from psoriasis comprising the step of administering to the patient an antibody that binds to an antigen selected from the group of interferon gamma, interleukin 12, E-selectin, P-selectin, CD3 or alphaE integrin subunit.

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26. A method of claim 25 wherein said antibody is a humanized antibody.

27. A method of claim 26 wherein said antibody is the HuZAF, HuEP5C7, or HuM291 antibody.

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28. An immunodeficient mouse induced to exhibit a psoriasis-like syndrome by transfer of minor histocompatibility mismatched murine CD4<sup>+</sup> CD45RB<sup>hi</sup> T cells and administration of a proinflammatory lymphokine and a polyclonal lymphocyte activator.

29. A method of reducing the PASI of a patient suffering from psoriasis by at least 50%, comprising treating the patient with a neutralizing monoclonal antibody to interleukin 12.

5 30. The method of claim 29, wherein said antibody is humanized or human.

31. A method of treating psoriasis patients comprising the steps of (1) administering to the patients therapies that induce remission of their psoriasis, and then (2) treating the patients with a neutralizing monoclonal antibody to interleukin 12, wherein  
10 treatment with said antibody prolongs the median time to relapse by at least 50%.

32. The method of claim 31, wherein said antibody is humanized or human.

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